

STIC Search Report

STIC Database Tracking Number: 137570

TO: Randall Chin

Location: REM 6D55

Art Unit: 1744

November 10, 2004

Case Serial Number: 10/633461

From: Kendra Mellerson

Location: EIC 1700

REM 4B28

Phone: 571-272-2516

Kendra.Mellerson@uspto.gov

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Search Notes

No Cases Reported

US 6,503,981

4,926,517



PATNO'IS 4926517

DATE: NOVEMBER 10, 2004

LIBRARY: PATENT FILE: ALL

Your search request is: PATNO IS 4926517

Number of PATENTS found with your search request through: LEVEL $1 \dots 1$

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LEVEL 1 - 1 PATENT

1. 4926517 ; May 22, 1990 , Sweeper, Smith, Keith E. - 1612 S. Combee Rd., Lakeland, Florida, United States (US), 33801, 315300 (07)

CORE TERMS: brush, drive, arm, hub, sweeper, hydraulic, cylinder, tube, mounting, slot ...

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LEVEL 1 - 1 OF 1 PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

4926517

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May 22, 1990

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Sweeper

REISSUE: July 31, 2003 - Reissue Application filed Ex. Gp.: 1744; Re. S.N. 10/633,461 (O.G. October 21, 2003)

APPL-NO: 315300 (07)

FILED-DATE: February 24, 1989

GRANTED-DATE: May 22, 1990

CORE TERMS: brush, drive, arm, hub, sweeper, hydraulic, cylinder, tube,

mounting, slot ...

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Search statement

Query/Command: US4926517/PN

** SS 1: Results 1

Search statement

Query/Command: PRT FULL NONSTOP LEGALALL

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1/1 PLUSPAT - ©QUESTEL-ORBIT - image

PN US4926517 A 19900522 [US4926517]

TI (A) Sweeper

PA (A) SMITH KEITH E (US)

IN (A) SMITH KEITH E (US)

AP US31530089 19890224 [1989US-0315300]

PR US31530089 19890224 [1989US-0315300]

IC (A) E01H-001/02

EC E01H-001/05C

ORIGINAL (O): 015082000; CROSS-REFERENCE (X): 015179000 PCL

015392000

DT Basic

 \mathbf{CT} US3284830; US3879786; GB3720

STG (A) United States patent

AB A sweeper includes a support structure having parallel arms which may be moved apart to allow a brush held between the arms to be replaced. Each of the arms has a hub mounted thereon by a universal joint which provides automatic alignment of the two hubs to provide a single axis of rotation for the brush. One of the hubs is connected to a hydraulic drive motor and includes a plurality of slots, one of which receives a drive lug on the interior of the brush which is preferably of the type having a core of a thin metal tube. A raising and lowering mechanism comprises a parallelogram having a hydraulic cylinder in the center for controlling the configuration of the parallelogram. As the brush is raised its support mechanism remains parallel to the vehicle and moves closer to it. A unique stop element is mounted to the hydraulic cylinder to provide a minimum height for the sweeper.

1/1 LGST - ©EPO

PN US4926517 A 19900522 [US4926517]

AP US31530089 19890224 [1989US-0315300]

ACT 20031021 US/RF-A

> REISSUE APPLICATION FILED EFFECTIVE DATE: 20030731

UP 2003-44

1/1 CRXX - ©CLAIMS/RRX

PN 4,926,517 A 19900522 [US4926517]

PA Smith, Keith E

ACT 20030731 REISSUE REQUESTED

ISSUE DATE OF O.G.: 20031021

REISSUE REQUEST NUMBER: 10/633461

EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 1744

Reissue Patent Number:

Search statement

Search statement

Query/Command: FILE INPADOC

PLUSPAT - Time in minut The cost estimation below is standard price list	es: 0,46 based on Questel'	s ·
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LGST - Time in minut The cost estimation below is standard price list	based on Questel'	
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Legal-Status informations	Estimated cost : : 1	0.60 USD
	Estimated cost :	0.50 USD
Cost estimated for the last	Estimated cost : database search :	1.23 USD
Estimated total session cost	:	4.26 USD
CRXX - Time in minute The cost estimation below is standard price list	es : 0,16 based on Questel's	3
Records displayed and billed	Estimated cost:	
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	Estimated cost :	0.50 USD
cost estimated for the last of	database search :	6.29 USD
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1 Patent Groups

** SS 1: Results 2

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PN CA 1334886 A1 19950328 [CA1334886]

TI **SWEEPER**

LA - ENG

IN - SMITH KEITH E [US]

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- CA 613419/89-A 19890927 [1989CA-0613419] · **AP**

PR US 315300/89-A 19890224 [1989US-0315300]

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CA1334886 C 19950328 [CA1334886] PN

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2/2 INPADOC - ©INPADOC

US 4926517 A 19900522 [US4926517] PN

TI - SWEEPER

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- US 315300/89-A 19890224 [1989US-0315300] AP

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PN US4926517 A 19900522 [US4926517]

AP US31530089 19890224 [1989US-0315300] ACTE -20031021 US/RF-A

REISSUE APPLICATION FILED EFFECTIVE DATE: 20030731

UP 2003-44

Search statement